



GREASES

UNION GARAGE

(Near Auto Camp Grounds)

Mat Karlinger

Geo. Caskey

EXPERT AUTO REPAIRING

FORD SERVICE

GENUINE FORD PARTS

STORAGE

Jackson and Winchester Sts., Roseburg, Ore.

OILS

Lee Tires

Smile at Miles

No Tires Better Made

No Better Tires Made

DRIVERS SHOULD KNOW THESE ANSWERS

Expert Prepares List of Questions for Motorists.

Will Prove Profitable to Any Automobile Owner to Search for Answer to Any of Queries—It Will Save Money.

Thomas A. Edison's now famous phonograph caused a real sensation practically every part of the country. It caused others to send out queries, some of them serious, others in a lighter vein. George H. Kubler, chief engineer of a big motor company, has prepared a list of questions for motorists in which he asks a number of questions that any automobile owner should be able to answer.

Mr. Kubler, knowing the answers will save a great deal of time and money."

number of points of lubrication on your car?

at least three reasons for over-heating of engine?

and oil consumption per mile? and speed in miles per hour at which engine will perform most efficiently and economically?

average road, driving at a speed of twenty-five miles per hour what time is required to bring your car to a dead stop?

driving in high speed on a level road, what is the lapse of time in seconds to accelerate from five to twenty miles per hour?

what is the purpose of the various parts of a transmission?

What is the correct grade of lubricating oil you should use for your car?

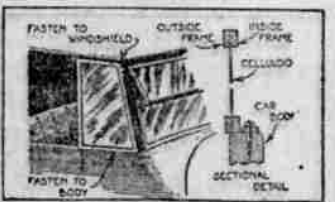
PROTECTS OCCUPANTS OF CAR

Auxiliary Windshield of Celluloid Affords Driver Clearer Vision Ahead of Him.

One form of auxiliary windshield which will protect the occupants of an automobile from rain and wind is made as shown in the illustration.

This shield consists of a sheet of celluloid in a brass frame screwed jointly to the edge of the body adjacent to the windshield and to the windshield frame.

One of these shields is used at the side of the car and the side curtains



Riding in an Automobile is Made Much More Pleasant by an Auxiliary Shield Against Rain or Snow.

are altered by extending the edges so as to fasten to the brass frames. With these a clearer vision is afforded the driver when the side curtains are in place. The transparent celluloid will not break and shatter as would glass, and when dulled it is renewable by separating the screwed brass strips. These shields are about 12 inches wide and made to correspond in height with the windshield.

The polished brass enhances the appearance of the car, apart from serving as a frame for the celluloid. The freedom from the usual dust and dirt obviates the use of glass or goggles.—Popular Science Monthly.

GOOD ADVICE ON DRIVING MOTORS

Proficient Pilot Soon Learns to Watch Road Some Distance in Advance of Car.

ALWAYS ALERT FOR DANGER

Some Drivers Dodge Every Little Hole, Stone, Horseshoe and Broken Bottle With Short Turn of the Steering Wheel.

Some motorcar drivers run their cars along the road at nearly uniform speed, preserve an almost straight course, with scarcely perceptible deviations when the road is straight, avoiding small obstructions on the surface as if by good luck more than intention, and never getting into tight places in traffic that require sudden dexterous movements to prevent collision or other accident.

On the other hand, there are drivers who dodge every little hole, stone, horseshoe and broken bottle with a short turn of the steering wheel that results in an unpleasant swaying of the car body; who slow up and start ahead with annoying frequency and are repeatedly treating their companions in the car to thrilling moments of suspense as they narrowly avert the running down of a slower moving pedestrian or a cyclist.

Looking Ahead. These differences are noticeable alike on city streets and country roads, and are amply sufficient to make it a delight to ride with one friend at the wheel and almost torture to sit in the car behind another. You may be unconscious of the precise reasons that give you confidence in the one and make you apprehensive with the other, yet the feeling is there. In all probability the secret lies in this fine point in driving an automobile—the distance ahead of the car at which the driver focuses his gaze.

The proficient driver has early learned to watch the road far in advance of his car—as far, in fact, as the road is visible. On a straight, level road this may be several miles, on a winding course as far as the next turn; on a hilly road the crest of the next rise, and on city streets as far as the state of the traffic permits the way to be seen clearly.

Following this practice, all bad places and small objects on the surface of the road are seen long before the car comes to them, and almost unconsciously the car is steered to avoid them. The action begins so early that the movement is practically imperceptible to other passengers, and the driver does not find it necessary to keep his eyes fixed upon the spot or object until it has passed; he has early insured that it will not be struck by the wheels, and so continues to keep his eyes focused away ahead. Thus he avoids dropping his eyes to watch all such near objects and raising them again to the focussing point, a practice that becomes wearisome to the driver and gives rise to unexpected emergencies.

Indifferent Drivers.

The novice or indifferent driver who concentrates much of his attention on the road directly in front of his wheels does not see impediments far enough in advance to begin a gradual movement in avoidance of them, but must make quick turns to swing out around the holes, stones and other obstructions. Then, with his attention fixed upon the particular thing or place he is avoiding, he is unprepared for the next one, which he has not seen.

The human eye is like a camera in this respect that when focussed upon the distance the immediate foreground is also in fairly good focus, but when focussed only a few yards or two or three rods ahead, the background is very indistinct. Consequently the motorcar driver who watches the road at the point of disappearance finds that the foreground takes care of itself—that is, he subconsciously directs the movements of the car without any distraction of his attention from what is coming further on. So his car follows a straighter course, with long, easy sways that do not cause any swaying of the body, and his companion motorists scarcely realize that there are any bad places in the road over which they are traveling.

Similarly in city traffic the proficient driver watches the movements of all the vehicles well in advance and, by judging their speed and noting their direction of motion, is on the alert for the slightest sign of an intention to

slow down or turn into a side street or pass around a wagon or car going in the same direction. He governs his own movements accordingly, and easily avoids liability of running into another vehicle.

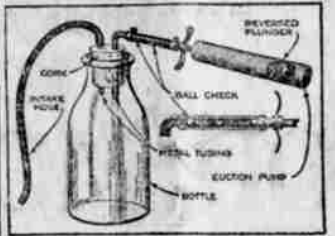
DRAINING FUEL FROM CARBURETOR CHAMBER

Suction Device Illustrated Does Work Easily.

Not Necessary to Remove Tank or Disconnect Heating and Feed Connections—Any Water or Particles Drawn Out.

In some six-cylinder automobiles no provision is made for draining the carburetor, or vacuum tank, without removing them or disconnecting the heating and feed connections and allowing the fuel in the vacuum tank to run off through the disconnected feed pipe. All this makes a lot of work and trouble merely to remove the few drops of water or particles of dirt that interfere with the operation of the carburetor.

The little device shown in the drawing will quickly draw all the fuel from



When Draining the Contents of the Carburetor Float Chamber and Vacuum-Feed Tank of an Automobile, the Suction Device Illustrated Makes It Unnecessary to Disconnect the Float Chamber.

the carburetor and vacuum tank without removing anything but the cover of the float chamber.

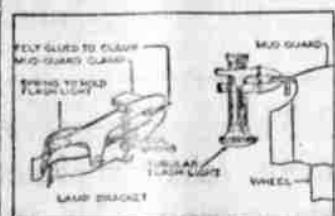
Two pieces of metal tubing are inserted through a tight-fitting cork, fitted into a quart bottle. One tube leads to a common type of small bicycle pump, in which the leather washer on the plunger has been reversed to produce suction instead of pressure. A BB-shot is dropped into the short rubber connection between the pump and bottle, to serve as a check valve.

By removing the screws holding the cover of the float chamber it can be lifted off, then the second rubber tube is inserted so that its end will reach the lowest part of the float chamber. Upon operating the pump, the contents of the carburetor and vacuum tank are sucked into the bottle without spilling a drop, and any water or particles of dirt that may be present will be brought along.—Popular Mechanics Magazine.

FLASHLIGHT COMES IN HANDY

Device for Attaching it Where Needed When There Is No Companion to Hold It.

For those who prefer the tubular flashlight in the trouble light connected to the storage battery, for tire-repair work, a handy device is a sheet-metal clamp which holds the flashlight in such a position as to throw the light where it is needed. The idea would be of little use to the driver who



A Flashlight Clamp is Handy for Lone Night Driver.

always has a companion to hold the light for him in case of trouble, but for those who often drive alone, there is a decided advantage. The metal used should be stiff brass or steel, but the spring which holds the flashlight must of course have sufficient springiness for this purpose. The light will be found convenient for tire changing in the position shown, but if some other angle is preferred, the clamp can readily be made to give it.—Popular Mechanics.

Results of Slow Sparks. Too late an ignition spark will cause loss of power and fuel.

NEWLY INVENTED MUD GUARD

Acts as Shield to Prevent Throwing of Mud Against Radiator by the Wheels.

The object of this new invention is to prevent the throwing of mud against the radiator by the wheels. A further

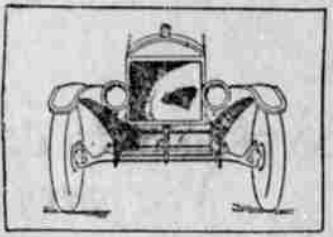


Diagram Showing Guard in Use.

object is to provide a mud guard secured to the ordinary guards of the car and extending across the front of the car at the lower portion of the radiator.—Scientific American.

NO TROUBLE TO KEEP CAR QUIET

Oil Can and Wrench Will Banish the Squeaks.

Necessary to See That All Parts Are Greased Regularly and That All Nuts Are Properly Tightened.

There is no excuse for a noisy automobile. Only carelessness and lack of attention can account for squeaks in any car. The automobile that passes you, carrying its own hand is a re-

BOULEVARD POLICE IN CHICAGO START "SAFETY FIRST" CAMPAIGN



At intervals along the prominent boulevards in Chicago are signs warning automobilists to observe the law. Since the signs have been put up arrests for violation of automobile laws have decreased 20 per cent.

lection on the owner and he may be set down as thoughtless. "Sometimes it is hard to find a squeak, but that does not mean that it is hard to find the big ones," says a prominent dealer. "The one and only enemy of the squeak is the oil can and the single enemy of the rattle is the wrench. Keep the car tightened up and the parts greased sufficiently and your car will run as silently and smoothly after a year's use as the day you bought it.

"Keep the car lubricated. It will repay you in added car life, minimum mechanical trouble and greater satisfaction all round."



Don't Take Gas Costs So Seriously

Recently fuel expenses instead of saving about them. You can any time you take a notion. It's all up to you. You have the means at hand. It is for you to choose—whether you want to continue paying heavy travel tax or not.

Don't make a nickel's worth of difference what your car came from the factory—what the make—the size—the number of cylinders, it can be made to produce far greater mileage with a new Stromberg Carburetor.

This is not mere say so. You're not taking a chance. It's not a matter of may be you will get more mileage—and may be you won't. You will absolutely.

Yours is not the first car of its kind, its size or its age, that has been equipped with a new Stromberg.

The New Stromberg holds world mileage records in practically all makes of machines—under every conceivable road and climatic condition. There isn't a car in operation that

can't be made to give more mileage with Stromberg equipment. And by more mileage—we mean a lot more—enough more to make a sizeable hole in your gas bill.

We have facts galore to back up our assertions—proof positive that the New Stromberg will make a radical reduction in fuel consumption and cost on any car.

Come and look over this evidence of economy. Put a New Stromberg on your car for a Ten-Day Test.

If it doesn't prove up—we will take it back. You've got to get more mileage—more power—more speed—better acceleration—or you'll get your money back.

Ten Days Free Trial

SPAUGH & HOHL

SALES SERVICE

Oak & Stephens Sts.

Advertisement for Bosch Magnetos and Zenith Carburetors, featuring a large illustration of a car and text describing the products and shop location (406 W. Cass St., Phone 84).